

From: [Akhter Hossain](#)
To: ["SMITH, MARTIN L"](#)
Cc: [Jump, Christine](#)
Subject: RE: MDL's
Date: Tuesday, February 25, 2014 3:31:35 PM

Martin,
Please send the list of the compounds (along with MDL and RL) those don't have Kdhe RSK number.
Thanks

Akhter

From: SMITH, MARTIN L [mailto:smith.martin@cleanharbors.com]
Sent: Monday, February 17, 2014 8:05 AM
To: Akhter Hossain
Subject: FW: MDL's

Akhter, please see the email from our consultant, iSi, and the certifying engineer, below. There are a few requests for your approval regarding the Wichita facility.

Safety Starts With Me: Live It 3-6-5

Martin L. Smith

Director, Corrective Actions and Discontinued Operations
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From: Brady Gerber [mailto:BGerber@isienvironmental.com]
Sent: Friday, February 14, 2014 1:02 PM
To: SMITH, MARTIN L
Subject: MDL's

Marty

Please see email below regarding the comparison to reporting limits rather than MDL's. Let me(or

Stuart) know if you have any questions.

Thank You

Brady

From: Stuart Klaus [<mailto:sklaus@geostatenvironmental.com>]

Sent: Friday, February 14, 2014 12:48 PM

To: Brady Gerber

Subject: RE: Disregard Last email

Brady,

Proposed E-mail to Martin S & Then to Akhtar (SP?):

Martin,

In comparing the analytical results for the third rinsate water from the Clean Harbor Building B (and also some preliminary results from Building D), it has become apparent that some additional clarification is required for the agreed upon comparison standards. The current comparison standards are KDHE Tier II Risk Based Standards, the secondary standard for comparison is the MDL (Method Detection Limits) - a third criteria or adjustment can be made for analytes that are present in the source water (City of Wichita - Public Water Supply). Where the RSK levels are established the expected values are clear (results above "fail" or below "pass"), the clarification is for those analytes that have no established RSK levels - and MDL's are to be compared.

The difficulty lies in that the MDL does not routinely equal the laboratory reporting limit (RL), typically the RL exceed the MDL - which establishes baseline for detections and non-detections (ND) for given samples. Therefore, samples results that are coming back ND - are still "failing" the comparison to the MDL. Of course when diluted, the RL for a given sample can become several times higher than the MDL. However, even when samples are analyzed without dilutions, RL's are often above the MDL.

For example the sample analyzed that was obtained for source water (City of Wichita) has multiple instances where the MDL levels are not met (although the RL are often very close to the MDLs). The city water sample was not diluted and the majority of the results (as expected for a public water supply) were ND.

There is also a problem when comparing to analytes (typically metals) that do not have RSK levels that are common constituents in water, - they may have secondary drinking water levels based on objectionable levels for hardness or taste - such as calcium, sodium, iron, etc. falling back to MDL's (or even RL's) in this circumstance may be difficult to meet. Even to meet the City of Wichita analytical result for some constituents may be very difficult. For example calcium - a primary constituent in concrete - for water pressure sprayed

onto concrete not to pick up some calcium from surface may be unrealistic.

Therefore the suggested path forward is to meeting the RL's (of undiluted samples) for those constituents where RSK levels have not been established. For specific constituents where RSK levels have not been established that are common constituents (calcium, sodium, iron,...) an alternative standard such as provided here:

<http://water.epa.gov/drink/contaminants/secondarystandards.cfm> as also referenced from here: <http://www.kdheks.gov/pws/> is suggested. Other specific constituents beyond those identified in the secondary standards may still need to be addressed in the future and those will be addressed on a case by case basis.

If you have any Q's or concerns please contact me at your convenience.

Thanks

Stuart Klaus

Stuart B. Klaus, P.E.

Senior Engineer

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***** ATTACHMENT NOT DELIVERED *****

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For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900.

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